

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1-15. (canceled)

16. (currently amended) A computer navigation system for implementing a multi-step surgical procedure, wherein the multi-step surgical procedure comprises a plurality first sequence of steps including at least a particular step, a prior step performed before the particular step, and a future step performed after the particular step, the computer navigation system comprising:

means for identifying the particular a current step within the multi-step surgical procedure;

means for identifying a component usable in the multi-step surgical procedure;

~~means for determining the consequent step within the multi-step surgical procedure based on the identity of the component and the particular step, wherein the consequent step is selected from a group of steps including at least the particular step, the prior step, and the future step~~

means for analyzing steps of the surgical procedure including a step other than the current step or an immediately subsequent step in the first sequence;

means for identifying the consequent step as the first step analyzed for which the component is acceptable; and

~~means for, based on the consequent step,~~ automatically jumping to and displaying a representation related to the consequent step without direct interaction between a user and the computer navigation system.

17. (canceled)

18. (currently amended) The system of claim 16 that includes means for identifying a particular location of the component, and ~~wherein the means for determining determines~~ identifying the consequent step based on the location, ~~the identity of the component, and the particular step.~~

19. (canceled)

20. (original) The system of claim 16 wherein the component is a multipart component capable of self-identifying the component's composite parts.

21. (original) The system of claim 20 wherein the multipart component is a tool with an attached device wherein the tool can identify the attached device.

22. (currently amended) The system of claim 20 wherein the multipart component is a tool with an attached device wherein the attached device is separately identifiable.

23. (previously presented) The system of claim 18 wherein the means for identifying a particular location of the component is incorporated within the computer navigation system.

24. (previously presented) The system of claim 16 that includes means for configuring the consequent step with a parameter of the component.

25. (currently amended) The system of claim 16 wherein the consequent step comprises a warning that the component is inappropriate for ~~the particular~~ any step that is analyzed.

26. (original) The system of claim 16 wherein the consequent step includes controlling a piece of auxiliary apparatus.

27. (currently amended) The system of claim 16 that includes means for identifying an additional component and ~~wherein the means for determining~~ determines the consequent step based on ~~the identity of the component, the identity of the additional component, and the particular step.~~

28. (canceled)

29. (previously presented) The system of claim 16 wherein the multi-step surgical procedure is a computer controlled and directed surgical procedure.

30. (currently amended) The system of claim 16 that includes a database of user preferences and ~~wherein the means for determining~~ determines the consequent step based on the database, ~~the identity of the component, and the particular step.~~

31-34. (canceled)

35. (currently amended) A method performed by a computer navigation system of determining and displaying a consequent step ~~within a multi-step~~ of a procedure comprising a first sequence of steps, the method comprising the steps of:

identifying a multi-step procedure;

providing a computer navigation system that implements the multi-step procedure, wherein the computer navigation system performs the steps of:

identifying a particular current step ~~within the multi-step~~ of the procedure;

identifying a component usable in at least one step of the multi-step procedure;

identifying a particular location of the component within a field of tracking of the computer navigation system;

analyzing whether the component is acceptable for use in steps of the surgical procedure including a step other than the current step or an immediately subsequent step in the first sequence;

determining the consequent step ~~within the multi-step procedure~~ based on the location, the identity of the component, and the particular identity of the current step, ~~wherein the consequent step is selected from a group of steps including at least a current step, a prior step, and a future step;~~

based on the determination of the consequent step, displaying a representation related to the consequent step on a display unit.

36. (canceled)

37. (new) A method performed by a computer navigation system of determining and displaying a consequent step of a surgical procedure comprising a first sequence of steps, the method comprising:

- identifying a current step of the surgical procedure;
- identifying a component being tracked by the computer navigation system that is to be utilized in at least one step of the surgical procedure;
- analyzing steps of the surgical procedure including a step other than the current step or an immediately subsequent step in the first sequence;
- identifying the consequent step as the first step analyzed for which the component is acceptable; and
- automatically jumping to the consequent step and displaying a representation related to the consequent step on a display unit.

38. (new) The method of claim 37, wherein the steps of the surgical procedure are analyzed according to a second sequence, wherein the second sequence depends upon the identity of the current step.

39. (new) The method of claim 38, wherein the second sequence comprises analyzing the current step, analyzing a prior step after analyzing the current step, and analyzing a future step after analyzing the prior step.

40. (new) The method of claim 38, wherein the second sequence includes every step of the surgical procedure.

41. (new) The method of claim 37 further comprising:
tracking a position of the component within a surgical field, wherein the consequent step is identified based on the position of the component.

42. (new) The method of claim 37, wherein the component is a multipart component capable of self-identifying composite parts of the multipart component to the computer navigation system.

43. (new) The method of claim 42, wherein the multipart component comprises a tool with an attached device, wherein the tool can identify the attached device.

44. (new) The method of claim 42, wherein the multipart component is a tool with an attached device, wherein the attached device is separately identifiable.

45. (new) The method of claim 37, further comprising:
configuring the consequent step with a parameter of the component.

46. (new) The method of claim 37, wherein the consequent step comprises a warning that the component is inappropriate for any step that is analyzed.

47. (new) The method of claim 37, wherein the consequent step includes controlling a piece of auxiliary apparatus.

48. (new) The method of claim 37, further comprising:
identifying a second component that is to be utilized in at least one step of the surgical procedure, wherein the determination of the consequent step is based on the identity of the component, the identity of the second component, and the identity of the current step.

49. (new) The method of claim 37, further comprising identifying the consequent step based on a database of user preferences.

50. (new) The method of claim 37, wherein a first representation is related to the current step and a second representation is related to the consequent step.